



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,560	01/16/2002	Robert G. Baker	BAKER=2	1788

7590 10/22/2003

BROWDY AND NEIMARK, P.L.L.C  
624 Ninth Street, N.W.  
Washington, DC 20001

EXAMINER
----------

PERRIN, JOSEPH L

ART UNIT	PAPER NUMBER
----------	--------------

1746

DATE MAILED: 10/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/046,560

Applicant(s)

BAKER ET AL.

Examiner

Joseph L. Perrin, Ph.D.

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 15-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) 2,3,5,6,8-10,12 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 1-14, in Paper No. 5 is acknowledged.
2. The traversal is on the ground(s) that "the method for cleaning an evaporator of an air handling system claims a process in which the particular components of the claimed system are used". This is not found persuasive because the apparatus can be practiced by another and materially different process other than a method for cleaning and/or without the step of introducing water.
3. Applicant further traverses on the ground(s) "that different classifications for the two groups is largely immaterial, since it is assumed that the Examiner will search online rather than manually". This is not found persuasive because, while there may be some overlap in the separate searches, the method of searching is wholly irrelevant since whether the search is done online or manually does not negate the fact that the search required for one group is not necessarily required for another, for instance as shown by their different classifications, and therefore, such a complete search for both groups would create an undue burden for the Examiner.
4. The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Objections***

5. Claim 2 is objected to because of the following informalities: The phrase "the flow control device is selected" should be changed to --the flow control devices are selected-- since antecedent basis is directed to the plural "flow control devices" of claim 1.

Appropriate correction is required.

6. Claim 3 is objected to because of the following informalities: The claim is directed to the "method" of claim 1. However, this is believed to be a typographical error since claim 1 is an apparatus with no method steps. Accordingly, the claim is construed as directed to an apparatus. However, clarification and correction are still required.

7. Claims 3, 5-6, 8-10 & 12 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 3, directed to treating agents usable in the claimed apparatus, is considered directed to a future intended use, which is given little patentable weight in apparatus claims. Claims 5-6 & 8, directed to the operating water pressure of the claimed apparatus, are considered directed to a future intended, which is given little patentable weight in apparatus claims. Claims 9-10, directed to how the apparatus is controlled (*i.e.* automatically or manually), are considered directed to a future intended use, which is given little patentable weight in apparatus claims. Claim 12, directed to how the

Art Unit: 1746

apparatus is operated relative to the object to be cleaned, are considered directed to a future intended use, which is given little patentable weight in apparatus claims.

Thus, the claims 3, 5-6, 8-10 & 12 fail to provide any further structural limitations to the claimed apparatus. Accordingly, the claims have not been further treated on the merits.

8. Claim 12 is objected to because of the following informalities: In claim 12, "the air handling unit" should be changed to --the air handling system--. Appropriate correction is required.

9. Claim 13 is objected to because of the following informalities: In claim 12, "the distribution manifold" should be changed to --a distribution manifold--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an outlet manifold 28 being attached to a distribution manifold 29 as injection spray nozzles or a low-pressure, waterfall-effect manifold (for instance, in Figure 1 and page 9, paragraph [0029]), does not reasonably provide enablement for an outlet manifold being injection spray nozzles or a low-pressure, waterfall-effect manifold. The specification does not enable any person

Art Unit: 1746

skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims. As best understood from the original disclosure, the claimed outlet manifold is a type of mixing manifold with, for instance, multiple fluid inlets and one single outlet (see, for instance, Figure 1 and associated text). Accordingly, the original description cannot be enabling for such a manifold with multiple outlets.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the phrase "a connector attached to fluid distributors" renders the claim as vague and indefinite. It is unclear what applicant intends. Is this the same "connector" as claimed in the line above it? Also, are the claimed "fluid distributors" directed to the distribution manifold 29 which may include spray nozzles or waterfall-effect manifolds? As best understood from the original disclosure (for instance, Figure 1), the claims are directed to the single connector 30 and distribution manifold 29, and the claims will be examined accordingly. However, clarification and correction are still required.

Claim 7 recites the limitation "the check valves" in line 2. There is insufficient antecedent basis for this limitation in the claim. The claim is directed to "the check

Art Unit: 1746

valves or other flow control devices". Since the claim has proper antecedent basis (to claim 1) for the broader "flow control devices" as claimed, the phrase "check valves or other" should be deleted.

***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1-2, 4, 7 & 14 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,266,123 to Brand.

Re claims 1-2 & 4, Brand discloses a cleaning apparatus having a supply section with an inlet manifold 506; flow control valves 506,508; treating agent containers 614,620,624,628,632,636,640; and an outlet manifold 512 connected to fluid distribution manifold 16 with spray nozzles 324,326,328,330,332,334,336,338,340,342 (see entire reference of Brand, for instance, Figures 4-5 & 9-10 and associated text).

Re claims 7 & 14, Brand also discloses having multiple flow control devices 580,582,584,586,588,590,592 connected to mixing valves 596,598,600,602,604,606, 608 (see, for instance, Figure 10). It is further noted that Brand is replete with teachings of multiple manifolds and control devices as claimed. Accordingly, recitation of Brand reads on applicant's claimed invention.

Art Unit: 1746

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

17. Claims 1-2, 4, 7 & 14 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2002/0179125 to Klos *et al.* (hereinafter "Klos").

Klos discloses a system including an intake manifold (1 in-3 out type, not numbered); three flow control valves 800,850,900 connected to three mixing valves 950,1000,1050; treating agent sources (e.g. "Detergent 1"); an outlet manifold (3 in-1 out type, not numbered) connected to a connector 500; and the connector attached to a distribution manifold 700 with multiple fluid spray nozzles 750 (see entire reference of Klos, for instance, Figures 1-2, paragraphs [0058] through [0064]). Although Klos does not expressly disclose a source of treating agent as being a container, the position is taken that the source must inherently include such a container since it is not understood how the liquid or solid treating agents disclosed by Klos could be contained without some type of structural container. Accordingly, recitation of Klos reads on applicant's claimed invention.



***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

20. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

21. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klos in view of US 5,839,454 to Matz.

Recitation of Klos is repeated here from above. However, Klos does not disclose a treating agent container having a visual indicator of contents contained therein, *i.e.* a visual level indicator. Matz teaches that it is known to provide a cleaning apparatus with means for visually detecting a low level condition in a detergent container to alert the user to replenish detergent (see entire reference of Matz, for instance, col. 3, lines 41-50, col. 5, lines 47-56, & Figure 2).

Therefore, the position is taken that a person of ordinary skill in the art at the time the invention was made would have been motivated to modify the apparatus of Klos with the detergent container with visual level indicator disclosed by Matz for the purpose of alerting a user of a low detergent level so the user may replenish the treatment agent accordingly.

***Allowable Subject Matter***

22. Claim 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

23. The following is a statement of reasons for the indication of allowable subject matter:

24. The prior art of record fails to teach each and every limitation of the instant invention. Specifically, the prior art fails to teach or suggest the claimed system further including a distribution manifold with a wiper for the purpose of directing and controlling

the flow pattern of treatment fluids, which is disclosed as an essential element of claimed invention, as described in claim 13.

25. For at least the foregoing reasons, claim 13 is believed to recite patentable subject matter.

### ***Conclusion***

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 6,019,117 to Detsch *et al.*, which discloses a decontamination apparatus with intake and output manifolds and flow control valves.

US 5,526,841 to Detsch *et al.*, which discloses a decontamination apparatus with intake and output manifolds and flow control valves.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (703)305-0626. The examiner can normally be reached on M-F 7:30-5:00, except alternate Fridays.

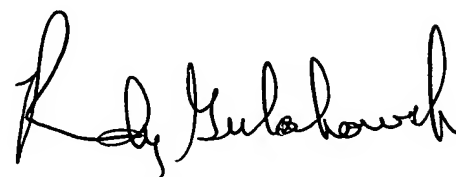
28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (703)308-4333. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)872-9311 for After Final communications.

Art Unit: 1746

29. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

Joseph L. Perrin, Ph.D.  
Examiner  
Art Unit 1746

jlj

A handwritten signature in black ink, appearing to read "Randy Gulakowski". The signature is fluid and cursive, with the first name "Randy" and last name "Gulakowski" clearly distinguishable.

RANDY GULAKOWSKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700